

# CUMULATIVE YEAR-END INDEX—1989

## SMALL ANIMAL AUTHOR INDEX

**A**

Allen, T.A., 1335  
Aller, S., 1447

**B**

Bauck, L., 258  
Bennett, R.A., 10, 122  
Blackburn, H., 1322  
Blevins, W.E., 1237  
Boothe, D.M., 811  
Boren, F.C., 946  
Bowers, T.L., 1377  
Broadstone, R.V., 50  
Bullock, L.P., 446

**C**

Campbell, K.L., 385  
Cantwell, H.D., 1237  
Carberry, C.A., 1322  
Carithers, R.W., 887  
Carter, L.J., 1335  
Ceragioli, K.L., 446  
Chester, D.K., 840  
Clemens-Chevins, C.L., 550  
Clinkenbeard, K.D., 301, 1223, 1347  
Constantinescu, G.M., 1365  
Cowell, A.K., 313  
Cowell, R.L., 301, 1223, 1347  
Cox, N.R., 550  
Crawford, M.A., 400  
Crowe, D.T., 421

**D**

Daniloff, J.K., 938  
Dennis, J.S., 717  
Desnoyers, P., 159  
DiPinto, M.N., 550  
Dow, S.W., 432, 686

**E**

Ellison, G.W., 946  
Evans, S.M., 825

**F**

Foil, C.S., 400  
Forrester, S.D., 811

**G**

Gibson, K.L., 938  
Godshalk, C.P., 1192  
Grandy, J.L., 50  
Greenwell, M., 1365

**H**

Hager, D.A., 703  
Han, C.M., 1237  
Harrington, K.S., 1021

Harvey, H.J., 1322  
Hathcock, J.T., 1199  
Hawkins, B.J., 1465  
Heath, R.B., 50  
Henderson, R.A., 1199  
Hendrix, C.M., 550  
Holmstrom, S.E., 1485  
Hosgood, G., 625  
Hsu, W.H., 584  
Hurd, C.D., 1237

**I**

Ialeggio, D.M., 1252

**J**

Johnson, B.W., 385  
Johnson, S.E., 1373  
Johnston, D.E., 56  
Jones, R.L., 432, 686

**K**

Kaplan, P., 1005  
Kaufman, G.M., 421  
Kitchell, B.E., 1079

**L**

Laing, E.J., 136  
Leboutet, M.J., 159  
Levitt, L., 899  
Lewis, D.D., 703, 946

**M**

MacDonald, R.K., 682  
Mason, G.D., 446  
Matthiesen, D.T., 797  
McCalla, T.L., 784, 911  
Meric, S.M., 1053  
Mikiciuk, M.G., 831  
Miles, K.G., 609  
Milton, J.L., 1199  
Montgomery, R.D., 1199  
Moore, C.P., 784, 911  
Moreau, J.-J., 159  
Moreau, P.M., 159  
Morgan, R.V., 1211

**O**

Orsini, J.A., 593  
Otto, C.M., 421

**P**

Parker, R.B., 703  
Pascaud, J.L., 159  
Pentlarge, V.W., 24  
Penwick, R.C., 287, 313  
Person, M.W., 930

Pope, R.W., 730  
Potthoff, A., 887

**R**

Rachofsky, M.A., 840  
Ravon, R., 159  
Read, W.K., 840  
Robertson, J.J., 1365  
Ross, L.A., 1041  
Rosychuk, R.A.W., 686  
Rubin, S.I., 1065

**S**

Sartin, E.A., 550  
Schaffer, C.B., 584  
Scheidt, V.J., 563  
Shane, S.M., 1021  
Shaw, S.M., 1237  
Smeak, D.D., 467  
Sorjonen, D.C., 248  
Stewart, L.J., 446  
Sumrall, R., 730

**T**

Thomas, M.L.E., 563  
Thomason, K.J., 169  
Thornhill, J.A., 831  
Troy, G.C., 811  
Tyler, R.D., 301, 1223, 1347

**U**

Umphlet, R.C., 1192

**V**

Vallat, J.-M., 159  
VanGundy, T., 36, 144, 269  
Vaughn, D.M., 248  
Vicini, D.S., 1192  
Vogel, K.M., 1237

**W**

Walker, R.L., 563  
Wellborn, S.G., 584  
Wendelburg, K.L., 467  
Wescott, R.B., 575  
White, S.D., 446  
Widmer, W.R., 1237  
Wiggs, R.B., 1475  
Wilson, R.B., 730  
Wingfield, W.E., 1335  
Wolf, A.M., 1088, 1223, 1347  
Wright, M., 50

**Y**

Yoshimura, E.K., 575

**Z**

Zanotti, S., 1005

# CUMULATIVE YEAR-END INDEX—1989

## SMALL ANIMAL AUTHOR INDEX

**A**

Allen, T.A., 1335  
Aller, S., 1447

**B**

Bauck, L., 258  
Bennett, R.A., 10, 122  
Blackburn, H., 1322  
Blevins, W.E., 1237  
Boothe, D.M., 811  
Boren, F.C., 946  
Bowers, T.L., 1377  
Broadstone, R.V., 50  
Bullock, L.P., 446

**C**

Campbell, K.L., 385  
Cantwell, H.D., 1237  
Carberry, C.A., 1322  
Carithers, R.W., 887  
Carter, L.J., 1335  
Ceragioli, K.L., 446  
Chester, D.K., 840  
Clemens-Chevins, C.L., 550  
Clinkenbeard, K.D., 301, 1223, 1347  
Constantinescu, G.M., 1365  
Cowell, A.K., 313  
Cowell, R.L., 301, 1223, 1347  
Cox, N.R., 550  
Crawford, M.A., 400  
Crowe, D.T., 421

**D**

Daniloff, J.K., 938  
Dennis, J.S., 717  
Desnoyers, P., 159  
DiPinto, M.N., 550  
Dow, S.W., 432, 686

**E**

Ellison, G.W., 946  
Evans, S.M., 825

**F**

Foil, C.S., 400  
Forrester, S.D., 811

**G**

Gibson, K.L., 938  
Godshalk, C.P., 1192  
Grandy, J.L., 50  
Greenwell, M., 1365

**H**

Hager, D.A., 703  
Han, C.M., 1237  
Harrington, K.S., 1021

Harvey, H.J., 1322  
Hathcock, J.T., 1199  
Hawkins, B.J., 1465  
Heath, R.B., 50  
Henderson, R.A., 1199  
Hendrix, C.M., 550  
Holmstrom, S.E., 1485  
Hosgood, G., 625  
Hsu, W.H., 584  
Hurd, C.D., 1237

**I**

Ialeggio, D.M., 1252

**J**

Johnson, B.W., 385  
Johnson, S.E., 1373  
Johnston, D.E., 56  
Jones, R.L., 432, 686

**K**

Kaplan, P., 1005  
Kaufman, G.M., 421  
Kitchell, B.E., 1079

**L**

Laing, E.J., 136  
Leboutet, M.J., 159  
Levitt, L., 899  
Lewis, D.D., 703, 946

**M**

MacDonald, R.K., 682  
Mason, G.D., 446  
Matthiesen, D.T., 797  
McCalla, T.L., 784, 911  
Meric, S.M., 1053  
Mikiciuk, M.G., 831  
Miles, K.G., 609  
Milton, J.L., 1199  
Montgomery, R.D., 1199  
Moore, C.P., 784, 911  
Moreau, J.-J., 159  
Moreau, P.M., 159  
Morgan, R.V., 1211

**O**

Orsini, J.A., 593  
Otto, C.M., 421

**P**

Parker, R.B., 703  
Pascaud, J.L., 159  
Pentlarge, V.W., 24  
Penwick, R.C., 287, 313  
Person, M.W., 930

Pope, R.W., 730  
Potthoff, A., 887

**R**

Rachofsky, M.A., 840  
Ravon, R., 159  
Read, W.K., 840  
Robertson, J.J., 1365  
Ross, L.A., 1041  
Rosychuk, R.A.W., 686  
Rubin, S.I., 1065

**S**

Sartin, E.A., 550  
Schaffer, C.B., 584  
Scheidt, V.J., 563  
Shane, S.M., 1021  
Shaw, S.M., 1237  
Smeak, D.D., 467  
Sorjonen, D.C., 248  
Stewart, L.J., 446  
Sumrall, R., 730

**T**

Thomas, M.L.E., 563  
Thomason, K.J., 169  
Thornhill, J.A., 831  
Troy, G.C., 811  
Tyler, R.D., 301, 1223, 1347

**U**

Umphlet, R.C., 1192

**V**

Vallat, J.-M., 159  
VanGundy, T., 36, 144, 269  
Vaughn, D.M., 248  
Vicini, D.S., 1192  
Vogel, K.M., 1237

**W**

Walker, R.L., 563  
Wellborn, S.G., 584  
Wendelburg, K.L., 467  
Wescott, R.B., 575  
White, S.D., 446  
Widmer, W.R., 1237  
Wiggs, R.B., 1475  
Wilson, R.B., 730  
Wingfield, W.E., 1335  
Wolf, A.M., 1088, 1223, 1347  
Wright, M., 50

**Y**

Yoshimura, E.K., 575

**Z**

Zanotti, S., 1005

## VOLUME 11 PAGINATION

<i>Issue</i>	<i>Pages</i>	<i>Issue</i>	<i>Pages</i>
January	1-61	July	777-847
February	113-181	August	881-951
March	241-325	September	993-1093
April	377-475	October	1185-1261
May	537-637	November	1313-1383
June	673-737	December	1433-1495

## SMALL ANIMAL SUBJECT INDEX

### A

Acid-base disorders, 593-604  
 anion gap, 595  
 buffer base and base excess, 595  
 clinical signs, 594-595  
 metabolic acidosis  
     causes, 598-599  
     pathophysiology and treatment, 597-598  
     treatment, 599-600  
 mixed disturbances, 602  
 primary and compensatory changes, 595  
 respiratory acidosis, 600-601  
 respiratory alkalosis, 601-602  
 Analgesia in dogs and cats, 887-897  
     central, 893-897  
         butorphanol, 894  
         meperidine, 894  
         morphine, 893  
         naloxone, 896  
         oxymorphone, 894  
         pentazocine, 894  
     ketamine hydrochloride, 896  
     peripheral, 889  
         corticosteroids, 888-889  
         local anesthetics, 892  
         nonsteroidal antiinflammatory agents, 888-892  
             acetaminophen, 890  
             aspirin, 890  
             flunixin meglumine, 892  
             ibuprofen, 892  
             phenylbutazone, 890  
         opioids, 892  
     signs of pain, 887-888  
     xylazine hydrochloride, 896  
 Anesthesiology, canine, lumbosacral epidural analgesia, 50-55  
 Arteriovenous fistulas, 625  
     clinical presentation, 630-631  
     pathophysiology, 625-630  
     treatment, 631-633  
 Arthroscopy, canine (see Coxofemoral joint)  
 Autoimmune disorders (see  
     Vogt-Koyanagi-Harada syndrome)  
 Avian orthopedics (see Orthopedics, avian)

### B

Bacteremia, 432-442  
 blood cultures, 438-442  
 culture media, 440

interpretation, 441-442  
 laboratory processing, 441  
 specimen collection, 438-440  
 causative agents, 433-438  
 anaerobic bacteria, 435  
 gram-negative bacilli, 434-435  
 gram-positive, aerobic bacilli, 435  
 polymicrobial bacteremia, 435  
*Staphylococcus*, 433-434  
*Streptococcus*, 434  
 pathogenesis, 432-433  
 Bacteriologic specimens, 686-702  
 anaerobic infections, 687  
 collection, 687  
     abdomen, 688, 696  
     blood, 438-440, 688, 700  
     bone, 692  
     cerebrospinal fluid, 482, 688, 699  
     ears, 688, 696  
     eyes, 688, 694-696  
     feces, 689, 694  
     joints, 688, 694  
     lower respiratory tract, 689, 697, 692  
     skin, 692, 693  
     urine, 687, 692-693  
     urogenital tract, 689, 694  
 interpreting culture results, 700-701  
 selection, 686-687  
 transport, 687  
 Beak prostheses, avian, 1365-1371, 1375  
 anatomy and skull biomechanics, 1366  
 medical assessment, 1366  
 preliminary assessments, 1365-1366  
 prognosis, 1371  
 surgical management, 1366-1370  
     postoperative care, 1368  
     prosthetic materials, 1367-1368  
 Bite wounds, by dogs, 313-320  
 Bone marrow indexes, 174-175

### C

Cancer  
 carcinogenesis and aging, 1079  
 common signs of, in animals, 1084  
 diagnosis, 1080  
 nursing care, 1082  
 staging, 1080  
 therapy, 1081-1082

## SMALL ANIMAL SUBJECT INDEX—CONTINUED

- chemotherapy, 136–143, 1082  
     activity, 138–142  
     effect on wound healing, 136–143  
     radiation therapy, 1081  
     surgical resection, 1081  
     tumor cell kinetics, 136–137  
     tumor types, 1080–1081
- Cardiology (see also *Dirofilariasis*), vascular  
     ring anomalies, 36–48  
     embryology, 36–37  
     epidemiology, 40  
     pathophysiology, 39–40  
     patterns, 37–40  
         aberrant intercostal arteries, 39  
         aberrant left subclavian artery, 37–38  
         aberrant right subclavian artery, 37–39  
         double aortic arches, 37–38  
         persistent right aortic arch, 37–38  
         persistent right dorsal aorta, 38–39  
         persistent right ductus arteriosus with  
             normal aortic arch, 38–39  
     physical and laboratory findings, 40  
     prognosis, 45  
     radiology, 42–43  
     treatment, 43–45
- Case reports  
     intradural-extradural lipoma in a dog,  
         1192–1196  
     subpubic urethrostomy to salvage a failed  
         perineal urethrostomy in a cat, 946–951  
     presurgical computed tomography in a dog  
         with a brain tumor, 159–168  
     small intestinal volvulus in a dog, 1322–1325  
     urethral prolapse in a male Yorkshire terrier,  
         682–683
- Central nervous system injury (see *Neurology*)
- Chemotherapy (see *Cancer*)
- Computed tomography, 159–168
- Computers, literature data base, 1021–1023
- Corneal sequestration (see *Ophthalmology*)
- Coxofemoral joint, canine, arthroscopy of,  
     930–935  
     equipment, 930  
     surgical procedure, 930–933
- Cultures (see *Bacteriologic specimens and Fungal infection*)
- Cytology  
     bleeding time ratio, 174–175  
     blood volume administration, 174–175  
     coagulogram, 174–175  
     red blood cell ratios, body fluids, 174–175
- 
- D** Dentistry, canine  
     anatomy, 1475–1482  
         dental nomenclature, 1475  
         osseous structures, 1475–1477, 1480  
         supportive soft tissue structures, 1476–1478,  
             1480  
         teeth, 1478–1482  
             external anatomy, 1478–1480  
             internal anatomy, 1478–1482
- dental examination, 1485  
     signs and staging of periodontal disease,  
         1485–1486  
     staging and treatment of periodontal disease,  
         1486–1490
- dental prophylaxis, 1447–1449, 1465–1472  
     cementoenamel erosions, detection of,  
         1449
- general anesthesia, 1448
- hand instruments used in, 1465–1466  
     care of instruments, 1470  
     curet, 1465, 1467
- explorer and periodontal probe,  
     1465, 1466  
     sickle scaler, 1465, 1467
- power equipment used in, 1467–1472  
     air-drive power units, 1470  
     care of equipment, 1470–1472  
     electric power equipment, 1470–1472  
     prophylactic angles, 1467, 1468  
     subsonic scalers, 1467–1470  
     ultrasonic scalers, 1467
- products used in, 1466–1467, 1470  
     chlorhexidine, 1466–1467, 1470  
     enzyme-based products, 1470  
     fluoride products, 1467  
     polishing compounds, 1467  
     zinc ascorbate formulations, 1470
- removal of supragingival tartar, 1448–1449
- root planing, 1449
- subgingival scaling, 1449
- extractions, 1490
- multirooted teeth, 1490
- technique, 1490
- home care, 1449, 1457  
     animal training techniques, 1452  
     cleaning techniques, 1452–1456  
     follow-up and reevaluation, 1456–1457  
     instruments used in, 1452–1453  
     products used in, 1453
- periodontic treatment, 1470  
     filling defects with polylactic acid, 1470  
     patient selection, 1486–1488  
     surgical techniques, 1488–1490
- Dermatology  
     dermatoses of the canine eyelid, 385–393  
         allergies, 392  
         bacterial and fungal disorders, 387–388  
         classification, 385–386  
         immune-mediated conditions, 388–392  
         miscellaneous conditions, 393  
         nutritional disorders, 393  
         parasitic disorders, 386–387  
         seborrhea, 393  
     epidermal necrolysis, toxic, 840–845  
     *Microsporum canis*, inapparent, in cats, 563–571
- Diabetes mellitus  
     in dogs (see *Hemoglobins, glycosylated*)  
     in geriatric cats, 1088–1092  
         adrenocorticotrophic hormone, 1092  
         clinical evaluation, 1088–1089  
         complicated, ketoacidotic, 1090  
         exogenous hormone therapy, 1093

## SMALL ANIMAL SUBJECT INDEX—CONTINUED

- growth hormone, 1093  
 insulin regulation, 1090  
 laboratory findings, 1089  
 pathogenesis, 1088  
 renal and hepatic disorders, 1092  
 thyroid hormone, 1092  
 uncomplicated, nonketotic, 1090  
**Dialysis**, peritoneal, 1325–1343  
 antimicrobial agents in dialysate, 1340  
 dialysate volume, 1336  
 hydration assessment, 1336–1337  
 nutrition, 1341  
 peritoneal catheters, 1337  
 peritonitis, 1337–1340  
 physiology, 1335  
 pleural effusion, 1340–1341  
**Diarrhea** (see Loperamide)  
**Dirofilariasis**  
 in cats, 1005–1015  
 clinical signs, 1006, 1008  
 diagnosis, 1008  
 biochemical profile, 1008  
 cardiopulmonary studies, 1008–1010  
 complete blood count, 1008  
 fecal examination, 1008  
 microfilarial screening, 1008  
 radiography, 1010  
 serology, 1010–1012  
 tracheal aspirates, 1012  
 urinalysis, 1008  
 differential diagnosis, 1012  
 experimental infection, 1005–1006  
 pathology, 1006–1007  
 treatment, 1012–1014  
     asymptomatic cats, 1014  
     symptomatic cats, 1012–1014  
 in humans, 575–578  
 clinical presentation, 575–577  
 prevention and control, 575–578
- client education, 814  
 drug interactions, 815  
 hepatotoxicity, 815–816  
 monitoring, 816–818  
 unsuccessful control, 818  
**Pathophysiology**, 811  
**Primary epilepsy**, 811–813  
**Secondary epilepsy**, 812–813  
**Exophthalmos** in dogs and cats, 784–792, 911–926  
 anatomy, 784–785  
 congenital, 911  
 craniomandibular osteopathy, 920  
 diagnosis, 785–787  
 diagnostic procedures, 787  
     computed tomography, 790  
     cytologic examination, 790  
     radiography, 787–791  
     ultrasonography, 790  
 eosinophilic myositis, 914–916  
 orbital cystic disease, 916  
 orbital inflammatory disease, 911  
     diagnosis, 913  
     treatment, 913–914  
 orbital neoplasia, 921–923  
 pathology, 785  
 traumatic, 916  
     diagnosis, 916–921  
     preventing additional swelling and hemorrhage, 918–919  
     preventing exposure of the ocular surface, 919  
     preventing orbital infection, 919  
     reducing orbital swelling, 919

### E

- Elbow**, canine, fragmented medial coronoid process, 703–715, 734  
 anatomy, 703  
 clinical signs, 706  
 incidence, 704–705  
 pathophysiology, 704–706  
 prognosis, 714  
 radiography, 706  
 surgery, 710  
**Epidermal necrolysis**, toxic, 840–845  
 causes, 840–841  
 clinical signs, 840  
 differential diagnosis, 841–842  
 treatment, 842  
**Epidural analgesia** (see Anesthesiology)  
**Epilepsy**, canine, 811–820  
 anticonvulsant therapy, 813  
     agents, 814  
         phenobarbital, 814  
         phenytoin, 814–815  
         primidone, 814  
     adverse effects, 814–815

### F

- Fistulas**, arteriovenous (see Arteriovenous fistulas)  
**Fluid therapy**, intraosseous infusion, 421–430  
 catheter maintenance, 424  
 complications, 424, 430, 426–427  
 contraindications, 423  
 infused substances, 422–423, 426–427  
 methods, 423–424  
 physiology, 421–422  
 rate of administration, 424  
**Fungal infection** (see also Dermatology)  
*Histoplasma capsulatum*  
 causative agent and epidemiology, 1223–1224, 1347–1349  
 culture of causative agent, 1228  
 in cats, 1223–1233  
 in dogs, 1347–1360  
 infection and pathogenesis, 1349  
     clinical signs in cats, 1224  
     clinical signs in dogs, 1349–1350  
 diagnosis, 1351–1356  
     cytologic, 1226–1228, 1349, 1351–1354,  
         1356  
     immunodiagnosis in dogs, 1354–1355  
     pathologic findings in cats, 1229  
     pathologic findings in dogs, 1355  
     prognosis in dogs, 1356  
     serology in cats, 1228

## SMALL ANIMAL SUBJECT INDEX—CONTINUED

treatment and prognosis in cats, 1229–1232  
 treatment in dogs, 1355–1356  
 hematology and serum chemistry, canine, 1350  
 hematology and serum chemistry, feline, 1225–1226  
 radiography and funduscopy in cats, 1224–1225, 1229  
 radiography in dogs, 1350, 1351, 1354–1355  
*Microsporum canis*, inapparent, in cats, 563–571  
*Rhinosporidium seeberi*, in dogs, 730–733

### **G**

Geriatrics, feline, 1037–1092  
 diabetes mellitus, 1088–1092  
 healthy geriatric cats, 1041–1046  
 cardiovascular system, 1042  
 endocrine system, 1043  
 gastrointestinal system, 1043  
 immune system, 1041–1042  
 polysystemic changes, 1041  
 prolongation of life, 1044  
 reproductive system, 1043  
 respiratory system, 1042–1043  
 therapeutics, 1044  
 urinary system, 1043  
 hyperthyroidism, 1053–1062  
 oncology, 1079–1084  
 renal failure, chronic, 1065–1074

### **H**

Heart (see Cardiology)  
 Heartworm (see *Dirofilariasis*)  
 Hematology  
 amended insulin-to-glucose ratio, 176, 178  
 amino acids, 176–177  
 anion gap, 176–177  
 chloride-to-phosphorus ratio, 176–177  
 endogenous creatinine clearance, 176, 178  
 endogenous electrolyte clearance, 176, 178  
 erythrocyte sedimentation rate, 170–171  
 free thyroxine index, 178  
 ionized serum calcium and total protein, 176–177  
 iron, 176–177  
 maturation indexes, 174–175  
 myeloid-to-erythroid ratio, 174–175  
 neutrophil-to-lymphocyte ratio, 171–172  
 osmolal gap, 176–177  
 platelet count estimates, 171–172  
 ratio of reticulocytes to nucleated red blood cells, 171–172  
 red blood cell indexes, 170–171  
 reticulocyte production index, 170–172  
 serum calcium and albumin, 176–177  
 serum urea nitrogen-to-serum creatinine ratio, 178  
 sodium-to-potassium ratio, 176–177  
 total protein-to-fibrinogen ratio, 170–171  
 white blood cell count estimates, 171–172  
 Hemoglobins, glycosylated, in dogs, 717–726  
 applications, 719

assay, 719  
 glycosylation reaction, 717  
 properties, 718–719  
 Herniorrhaphy, perineal, canine, complications of, 797–802, 822  
 fecal incontinence, 798–799  
 hemorrhage, 822  
 rectal prolapse, 798  
 recurrence of perineal hernia, 801  
 sciatic nerve injury, 797–798  
 entrapment by misplaced sutures, 797–798  
 positional sciatic neuropraxia, 798  
 suture misplacement  
 sciatic nerve, 797–798  
 rectal lumen or anal sac, 801  
 urethral damage, 822  
 urinary bladder necrosis, 822  
 urinary incontinence, 800–801  
 wound infection and abscess formation, 799–800  
 Histoplasmosis (see Fungal infection)  
 Hyperadrenocorticism, canine, cutaneous  
 markers of, 446–446  
 case selection, 446–447  
 endocrine tests, 446–447  
 Hyperthyroidism, feline, 1053–1062  
 clinical signs, 1053–1054  
 diagnosis, 1054–1055  
 incidence, 1053  
 laboratory evaluations, 1054  
 pathogenesis, 1053  
 physical examination, 1054  
 signalment of cats with, 1053  
 treatment, 1055  
 antithyroid medications, 1055  
 advantages and disadvantages, 1056  
 adverse reactions, 1055  
 therapy and monitoring, 1056  
 radioactive iodine therapy, 1059  
 advantages and disadvantages, 1059  
 follow-up care, 1059  
 response to treatment, 1059  
 surgical thyroidectomy, 1056  
 advantages and disadvantages, 1058  
 anesthesia, 1056  
 complications, 1058  
 preoperative preparation, 1056  
 surgical considerations, 1056–1058  
 surgical technique, 1058

### **I**

Intestinal volvulus (see Volvulus)  
 Ivermectin, safety of, 584–588  
 central nervous system effects, 586  
 environmental effects, 586  
 extralabel use, 585–586  
 overdoses, 584–585  
 withdrawal times, 586

### **J**

Joint disorders  
 osteochondritis dissecans of the canine stifle, 1199–1205

## SMALL ANIMAL SUBJECT INDEX—CONTINUED

history and physical examination, 1200–1201  
radiographic examination, 1201–1202  
results of therapy, 1201–1202  
signalment of patients with, 1199–1201  
elbow, canine, fragmented medial coronoid process, 703–715, 734

### L

Laboratory tests (see Hematology, Cytology, and Urine)  
Loperamide, 1373–1374  
dose recommendations, 1374  
indications, 1374  
mechanism of action, 1373  
side effects and toxicity, 1374

### M

Metabolic acidosis, 597–600  
*Microsporum canis*, inapparent infection in cats, 563–571  
and feline dermatophytosis, 563–564  
asymptomatic carriage, 564–566  
therapeutic considerations, 570  
Myiasis, *Cuterebra*, intracranial, 550–559  
clinical signs, 553–556  
*Cuterebra* life cycle, 551  
description of larvae, 556–558  
differential diagnosis, 556  
epizootiology, 553  
treatment, 558

### N

Neoplasia (see also Cancer)  
lipoma, intradural-extradural, canine, 1192–1196  
diagnosis, 1192  
physical findings, 1192–1194  
radiographic findings, 1195  
surgical treatment, 1194  
meningioma, canine, 159–168  
Nerves, peripheral, repair of, 938–944  
anatomy, 938–939  
damage to peripheral nerves, 939  
surgery, timing of, 939–940  
tension on nerves, 940  
surgical techniques, 940–942  
epineurial repair, 940  
perineurial repair, 940–941  
nerve grafts, 941–942  
nerve cuffs, 942  
suture material, 940  
Neurology (see also Epilepsy)  
central nervous system injury, 248–254  
membrane structure and function, 248–249  
membranes and eicosanoids, 251  
membranes and free radicals, 249–250  
treatment of injury, 251–254  
antioxidants, 251  
glucocorticoids, 251  
nonsteroidal antiinflammatory drugs, 251–254  
canine  
fibrocartilaginous embolism and

ischemic myelopathy, 287–298  
clinical presentation, 292, 295, 296  
differential diagnosis, 292–295  
pathogenesis, 287–292  
prognosis and therapy, 295–297  
intracranial tumors, 159–168  
lipoma, intradural-extradural, 1192–1196  
wobbler syndrome, 144–157, 269–284  
clinical presentation, 150  
diagnosis, 150–154  
differential diagnosis, 156  
medical therapy, 269–270  
pathophysiology, 144–150  
surgical therapy, 270–283  
myiasis, intracranial, in dogs and cats, 550–559  
peripheral nerves, repair of (see Nerves)  
Nonsteroidal antiinflammatory agents (see Analgesia)

### O

Ophthalmology  
corneal sequestration in cats, 24–32  
clinical management, 27–32  
assessment, 27–30  
conservative management, 30–32  
prognosis, 32  
surgical management, 32  
clinical presentation, 24–25  
histopathology, 25–26  
pathogenesis, 26–27  
dermatoses of the canine eyelid, 385–394  
exophthalmos in dogs and cats, 784–792, 911–926  
gerbils, 265–266  
harderian gland syndrome, 265–266  
guinea pigs  
blepharitis, 264  
calcification, 264  
corneal ulcers, 261–262  
scurvy, ophthalmic lesions, 260–261  
hamsters, 265  
conjunctivitis, 265  
trauma, 265  
rabbits, 258–261  
chronic rhinitis (snuffles), 258  
entropion, 258  
ocular discharge, 258  
*Pasteurella* infection, 259  
retrobulbar abscess, 258–259  
rats, 264–265  
chromodacyorrhea, 264–265  
hereditary disorders, 265  
Vogt-Koyanagi-Harada syndrome in dogs and humans, 1211–1218  
Opioids (see Analgesia)  
Orthopedics, avian, 899–910  
anatomy and physiology, 899  
bone strength, 899  
fracture type, 899  
infection, 900  
joint involvement, 899  
rotational deformity, 899  
soft tissue injury, 900

## SMALL ANIMAL SUBJECT INDEX—CONTINUED

synostosis, 899  
 fracture repair, 900  
 external fixation, 901  
 external immobilization, 900–903  
 internal fixation, intramedullary pins,  
     901–905  
 plates, 905  
 postoperative considerations, 906  
 presurgical evaluation, 900

### **P**

Pain (see also Analgesia), 887–897  
 physiology of, 888  
     central ascending pathways, 892–893  
     descending antinociceptive system, 893  
     inflammation and, 888  
     signs of in cats and dogs, 887–888  
 Parasitology  
     *Cuterebra* infection, 550–559  
     dirofilariasis, in humans, 575–578  
     *Microsporum canis*, inapparent, in cats, 563–571  
     primates, 1254–1267  
 Parathyroid hormone  
     after thyroidectomy in cats, 1058  
     control of in chronic renal failure in dogs and  
         cats, 831–834  
     clinical significance, 832  
     diagnosis, 832  
     medical management, 832  
     physiology, 831–832  
 Periodontal disease (see Dentistry, canine)  
 Perspectives in veterinary medicine, reflections  
     on suturing, 56–60  
 Platelets in pulmonary disease (see Pulmonary  
     disease)  
 Primates, pet, 1252–1258  
     management of, 1252–1253  
         ambient temperatures, 1252  
         housing requirements, 1252–1253  
         nutritional requirements, 1253  
     restraint and handling, 1253–1254  
 semiannual veterinary examination, 1254  
     complete blood count, 1255  
     fecal examination, 1254  
     physical examination, 1254  
     tuberculin testing, 1255–1256  
     vaccination, 1255  
     unsuitability of, 1252  
 veterinary care of, 1253–1257  
     chemical restraint and anesthesia, 1253–1254  
     common reasons for presentation, 1255  
         bloat, 1256  
         parasites, 1254–1267  
         pneumonia, 1256  
         prevention of zoonoses, 1256–1257  
         *Shigella* or *Salmonella* gastroenteritis, 1255  
     zoonosis precautions for handlers, 1256–1257  
 Pulmonary disease, platelets in, 1377–1380  
     adult respiratory distress syndrome, 1378  
     antiplatelet therapy, 1379  
     atherosclerosis, 1379  
     growth factors in platelets, 1379  
     neoplasia, 1379  
     platelet granule contents, 1378

platelet activation, 1377  
 pulmonary embolization, 1377–1378  
 vascular repair, 1378

### **R**

Rabbits, ophthalmology of (see Ophthalmology)  
 Radiographs, interpretation of, approach to,  
     825–829  
     anatomic abnormalities, 826  
     artifacts and normal variants, 825  
     lesions, 826  
     musculoskeletal system, 826–828  
     radiographic diagnosis, 826  
     ranking diagnostic differentials, 827  
     signalment, 825–826  
     thorax, 828–829  
 Radiology  
     effects of radiation, 1239–1240  
         acute, 1239  
             bone marrow syndrome, 1239  
             cerebrovascular syndrome, 1239  
             gastrointestinal syndrome, 1239  
         late, 1239–1240  
         radiation and cell damage, 1237–1240  
         cell death, 1238  
         direct action, 1238  
         indirect action, 1238–1239  
         radiation protection, 1240–1247  
         low-level exposure, 1240–1241  
         maximum permissible dose, 1241, 1247  
         philosophy of protection, 1241  
         techniques, 1242–1244  
         radiation units, 1239  
         radiation units and definitions, 1246  
         radiosensitivity and radioresponsiveness, 1240  
 Renal failure (see also Dialysis), chronic, in cats,  
     1065–1074  
     anemia, 1071–1072  
     causes, 1065  
     diagnosis, 1067  
     history and clinical signs, 1065–1066  
     laboratory findings, 1066–1067  
     management, 1068  
         agents used in, 1070  
         dietary management, 1068–1071  
             control of hyperphosphatemia, 1068–1070  
             feeding of anorectic patients, 1070–1071  
             homemade diet, recipe for, 1071  
             protein restriction, 1068  
             vitamins, 1071  
         fluid balance, 1068  
         metabolic acidosis, 1071  
         physical examination, 1066  
         signalment of patients with, 1065  
         vomiting, 1072  
 Reptiles (see also Tortoises)  
     postoperative care, 18  
     preparation for surgery, 16–17  
     surgical anatomy, 10–12  
         cardiovascular system, 10  
         cloaca, 11  
         digestive system, 11  
         integument, 10

## SMALL ANIMAL SUBJECT INDEX—CONTINUED

- lymphatic system, 10  
 respiratory system, 10–11  
 urinary system, 11  
 surgical diseases and procedures, 122–133  
 celiotomy, 123–125  
     chelonians, 124–125  
     lizards and crocodilians, 123–124  
     snakes, 123  
 cloacal organ prolapse, 128–130  
     colon prolapse, 129  
     copulatory organ prolapse, 129  
 cystotomy, 131  
 dystocia, 126–128  
 fracture repair, 132  
 gastrointestinal procedures, 130  
 lacerations, 122–123  
     shell fracture repair, 125–126  
 surgical instruments for, 17  
 suture materials and patterns for, 17  
 wound healing, 13  
 Respiratory acidosis, 600–601  
 Respiratory alkalosis, 601–602  
 Rhinosporidiosis, canine, 730–732  
     diagnosis, 731  
     occurrence, 730  
     pathologic findings, 731–732  
     treatment, 731  
 Ringworm (see *Microsporum canis*)  
 Rodents, ophthalmology of (see Ophthalmology)
- echocardiography, 616  
 evaluation of liver and diaphragm, 618  
 ocular ultrasonography, 621  
 pregnancy diagnosis, 621  
 prostate, 621  
 renal examination, 619–620  
 ultrasonographically guided biopsy, 616  
 display modes, 610–612  
     A-mode, 610–611  
     B-mode, 612  
     M-mode, 611–612  
 image interpretation, 612  
 image production, 609–610  
     acoustic impedance and attenuation, 609–610  
     emission and reception of ultrasound, 609  
     image artifacts, 610  
     image resolution, 610  
     time gain compensation, 610  
 techniques, 612  
 Urethral prolapse, 682–683  
 Urethrostomy, subpubic, feline, to salvage failed  
     perineal urethrostomy, 946–951  
     clinical presentation, 946–947  
     initial management, 947  
     recovery and follow-up, 949–951  
     surgical techniques, 947–949  
 Urine, laboratory tests of  
     endogenous creatinine clearance, 176, 178  
     endogenous electrolyte clearance, 176, 178  
     urine protein-to-urine creatinine ratio, 176, 178

### S

- Specimens, bacteriologic (see Bacteriologic specimens)  
 Spine, disorders of (see Neurology)  
 Suture materials for contaminated or infected wounds, 467–475  
     characteristics of materials, 468–472  
     recommendations, 473  
     risk of acute infection, 468–472  
     stitch abscess and sinus formation, 472–473  
 Suturing  
     esophagus, 56  
     linea alba, 55–56  
     small intestine, 56

### T

- Thrombocytopenia, with disseminated histoplasmosis, canine, 301–306  
 Trauma, dog bite wounds, 313–318  
 Tumors (see Cancer and Neoplasia)

### U

- Ultrasonography, 609–622  
     clinical applications, 614–621  
     contrast echocardiography, 616  
     Doppler techniques, 616

### V

- Vascular disorders (see Arteriovenous fistulas and Cardiology)  
 Vasculitis, 400–415  
     clinical spectrum, 402–415  
     pathophysiology, 401  
 Vogt-Koyanagi-Harada syndrome, 1211–1218, 1246  
     in dogs, 1213–1214  
     cause of, 1213  
     clinical findings, 1213  
     signalment of patients with, 1213  
     treatment, 1214  
     in humans, 1211–1213  
     clinical findings, 1212  
     signalment of patients with, 1212  
     treatment, 1212  
     other animal models, 1214–1216  
 Volvulus, small intestinal, 1322–1325  
     patient history and management, 1322  
     surgical treatment, 1322–1325

### Z

- Zoonosis (see also Primates, pet)  
 dirofilariasis, 575–578  
*Microsporum canis*, 563–571

## EQUINE AUTHOR INDEX

**A**

Adams, G.P., 1275  
 Adams, S.B., 64, 190  
 Andrews, G.C., 962

**F**

Foreman, J.H., 479, 640  
 Freeman, K.P., 485, 1100  
 Fretz, P.B., 850, 857, 954, 962

**N**

Nappert, G., 338

**B**

Bailey, J.V., 850, 857, 954, 962  
 Blanchard, T.L., 745, 1265  
 Blevins, W.E., 64, 190  
 Brewer, B., 1100

**G**

Gatewood, D.M., 1498  
 Ginther, O.J., 1275

**O**

O'Callaghan, M.W., 1110

**C**

Carroll, B.S., 485  
 Clem, M.F., 72, 184  
 Cox, J.H., 1498

**J**

Jacobs, K.A., 850, 857, 954

**S**

Santschi, E.M., 479, 640  
 Scrutchfield, W.L., 745, 1265  
 Slusher, S.H., 1100

**D**

DeBowes, R.M., 72, 184, 1498,  
 1505

**L**

Lamb, C.R., 1110  
 Larybyere, M., 338  
 Lees, M.J., 850, 857, 954, 962

**T**

Taylor, T.S., 745, 1265  
 Tranquilli, W.J., 1283

**E**

Elmore, R.G., 745, 1265  
 Engelking, L.R., 328

**M**

Martin, M.T., 745, 1265  
 McCue, P.M., 646  
 McIlwraith, C.W., 1287  
 Meek, L.A., 1396  
 Moore, J.N., 741  
 Morris, D.D., 1096, 1386

**V**

Varner, D.D., 745, 1265  
 Vrins, A., 338

**W**

Welch, R.D., 1505  
 Whitley, R.D., 1396

## VOLUME 11 PAGINATION

<i>Issue</i>	<i>Pages</i>	<i>Issue</i>	<i>Pages</i>
January	62-77	July	848-865
February	182-197	August	952-971
March	326-345	September	1094-1119
April	476-495	October	1262-1295
May	638-651	November	1384-1405
June	738-753	December	1496-1509

## EQUINE SUBJECT INDEX

### A

Anesthesia, injectable, for standing restraint, 1283-1285  
Antidotoxin serum, 1096-1099

### B

Bacterial endocarditis, 771  
causative agents, 771  
clinical signs, 771  
treatment, 771  
Bacterial meningitis, 479-483, 640-644  
analgesia and sedation, 642  
antimicrobial agents, 641-642  
control of edema and inflammation, 640-641  
diagnosis, 480-481  
cerebrospinal fluid analysis, 482  
clinical pathology, 481-482  
neurologic examination, 481  
physical examination, 481  
pathogenesis, 479-480  
in adults, 480  
in neonates, 479-480  
blood-brain barrier, 479-480  
immune system, 479  
umbilicus, 480  
supportive care, 641  
Bilirubin and bile acid metabolism, 328-333, 336  
bilirubin conjugates, 330-331  
effects of halothane, 330  
effects of isoflurane, 330  
fasting hyperbilirubinemia, 328-329  
heparin-induced bilirubin excretion in ponies, 331-332  
icterus, 332  
serum bile acids in hepatobiliary disorders, 332-333  
serum bilirubin, 328-329

### C

Cataract surgery, 1396-1401  
complications and sequelae, 1398-1400  
patient selection, 1396-1398  
postoperative management, 1397-1398  
preoperative care, 1396-1399  
surgical technique, 1397-1400  
aspiration, 1397-1399  
phacoemulsification with aspiration, 1397-1398  
Catheters, intravenous (see Thrombophlebitis)  
Cerebrospinal fluid (see Cytology and Bacterial meningitis)  
Cytology

membrane filter preparations of cerebrospinal fluid, 1100-1109  
capillaries, 1103  
cervical vertebral malformation or instability, 1103-1104  
choroid plexus cells, 1101-1102  
contaminants, 1102-1103  
ependymal cells, 1101-1102  
hypocellular pattern, 1103-1104, 1107  
increased cellularity  
and purulent inflammation, 1106  
with increased lymphocytes, with or without eosinophils, 1104-1107  
lymphocytes, monocytes, and macrophages, 1103  
neurons, 1102-1103  
possible protozoal infection, 1106  
subarachnoid lining cells, 1101-1102  
technique, 1100-1101  
wet-fixed trichrome-stained specimens, use in private practice, 485-492  
advantages of, 488-489  
for cytopathologists, 488-489  
for practitioners, 488  
cerebrospinal fluid, 487  
materials and methods, 485-486  
peritoneal fluid, 486  
synovia, 486-487  
thoracic fluid, 487  
transtracheal washings, 486  
uterine washings, 486

### D

Dystocia, 745-753  
allantoic hydrops, 751-752  
causes of, 745-747  
cesarean section, 1267-1272  
anesthetic regimen, 1268  
approaches, 1268  
complications, 1268  
postoperative measures, 1272  
surgical technique, 1268-1272  
examination of mares, 747-748  
fetotomy, 747, 749-750  
mutation and traction, 748-749  
normal parturition, 745  
obstetrical equipment, 747  
prepubic tendon, rupture of, 752-753  
uterine torsion, 1265-1272  
clinical signs, 1265  
diagnosis, 1265  
nonsurgical correction, 1266  
surgical correction, 1266-1267

**EQUINE SUBJECT INDEX—CONTINUED****E**

- Endocarditis, bacterial (see *Bacterial endocarditis*)  
 Endoscopy, fetal mobility, video imaging within the allantoic sac, 1275–1280  
 Endotoxemia, 741–744  
     antiinflammatory drugs and, 741–744  
     cause, 741  
     clinical signs, 742  
     mechanisms of disease, 742  
     treatment, 742–743  
 Endotoxins, 1096–1099  
     antibodies to core lipopolysaccharide components, 1097–1098  
     clinical trials, 1098  
     equine applications, 1099  
     definition of, 1096  
     effects of, 1096–1097  
 Equine Forum,  
     intraarticular medication for traumatic joint problems, 1287–1290, 1311  
 nonsteroidal antiinflammatory drug therapy for endotoxemia, 741–744

**F**

- Fetal mobility, video-imaging endoscopy of, 1275–1280

**G**

- Gastroduodenal ulcers in foals, 338–345  
     clinical signs and diagnosis, 340–342  
     management, 342–344  
     pathogenesis, 338–340  
 Giardiasis, 82–83  
 Grafting, principles of, 954–961  
     failure, causes of, 958–959  
     graft movement, 959  
     improper preparation, 958  
     infection, 958  
     separation, 958–959  
     goals and benefits, 954–955  
     epithelialization, 955  
     granulation tissue, 955  
     infection and inflammation, 955  
     wound contraction, 954–955  
 graft degeneration, 957–958  
 graft take, 957–959  
     adherence, 957  
     organization, 957  
     plasmatic imbibition, 957  
     revascularization, 957  
 types of grafts, 955–956  
     allografts, 955–956  
     autografts, 955–956  
     mesh grafts, 955–956  
     pinch grafts, 956  
     punch grafts, 956  
     sheet grafts, 955–956  
     xenografts, 955–956  
     wound preparation, 956–957

- Grafts, tunnel, 962–970  
     patient selection, 962  
     postoperative care, 965  
     results of, 963, 965–970  
     surgical procedure, 962–965

**H**

- Hepatic disorders (see *Bilirubin and bile acid metabolism*)

**I**

- Intraarticular medication (see *Joint disorders*)

**J**

- Joint disorders, traumatic, intraarticular medications for, 1287–1290, 1311  
     chondroprotection, 1288  
     corticosteroids, 1289–1290  
     effects of trauma on joints, 1287–1288  
     ideal treatment, 1288  
     polysulfated glycosaminoglycan, 1289  
     sodium hyaluronate, 1288

**L**

- Lameness, shoulder, 64–70  
     anatomy, 64  
     biceps brachii tendon, ossification of, 194  
     bicipital bursitis, 193–194  
     degenerative joint disease, 192  
     diagnosis, 64–70  
         clinical examination, 64–65  
         diagnostic local anesthesia, 65  
         synovial fluid analysis, 65  
         radiography, 65–69  
         ultrasonography, 68–69  
     fractures, 190–192  
     osteochondrosis, 192  
     sore shoulders, 190  
     sweeney, 193  
 Leukoencephalomalacia, 646–650  
     clinical syndromes, 647–648  
     differential diagnosis, 649–650  
     epidemiology, 648  
     mycotoxins, 646–647  
     outbreaks of, 646  
     seasonality, 647  
     treatment, 650  
 Liver disorders (see *Bilirubin*)

**M**

- Membrane filter preparations of cerebrospinal fluid (see *Cytology*)  
 Meningitis, bacterial (see *Bacterial meningitis*)  
 Moldy corn poisoning (see *Leukoencephalomalacia*)

## EQUINE SUBJECT INDEX—CONTINUED

**N** Nonsteroidal antiinflammatory drug therapy for endotoxemia, 741–744

**O** Obstetrics (see Dystocia and Endoscopy)

**P** Paraphimosis, 72–75  
clinical evaluation, 73–74  
medical therapy, 184–185  
pathophysiology, 73  
penile anatomy, 72–73  
surgical management (see also Penis and prepuce, surgical techniques), 185–187  
Penis and prepuce (see also Paraphimosis), 1498–1504  
neoplasia and parasites, 1498–1501  
equine sarcoidosis, 1499  
papillomas, 1499  
squamous cell carcinoma, 1498–1499  
priapism, management of, 1507–1508  
surgical techniques, 1505–1506  
cryotherapy, 1505–1509  
phallectomy, 1508–1509  
phallopexy, 1506–1507  
posthoplasty (circumcision or reefing), 1506–1507  
traumatic injuries, 1501–1503  
chemical injuries, 1502–1503  
contusions, 1501–1502  
lacerations, 1502  
thermal injuries, 1502  
venereal disease, 1501  
coital exanthema, 1501  
dourine (*Trypanosoma equiperdum*), 1501  
Pulmonary disease, diagnostic imaging of, 1110–1118  
radiographic patterns, 1111–1114  
alveolar, 1111–1112  
bronchial pattern, 1111, 1113  
cavitory lesions, 1111, 1113  
infiltrate, 1111, 1113  
hazy, 1111, 1113  
linear, 1111  
nodular, 1111  
interstitial, 1111–1113  
radiographic techniques, 1110–1112  
radionuclide imaging, 1115–1117  
ultrasonography, 1114–1116

**R** Radiography, pulmonary disease, diagnostic imaging of, 1110–1118  
Radionuclide imaging, pulmonary disease, diagnostic imaging of, 1110–1118  
Reproduction (see Paraphimosis and Dystocia)

**S** Second-intention healing, 857–864  
advantages and disadvantages of, 862–863  
antibacterial therapy, 859  
antiinflammatory therapy, 859  
assessment, 857  
contraction, 862  
debridement, 857–858  
epithelialization, 862  
fibroplasia, 859  
granulation tissue, 859–862  
inhibition of excess, 859–862  
stimulation of, 859  
inflammation, 857  
wound cleaning, 858–859  
Skin grafts (see Grafting, principles of and Tunnel grafts)

**T** Theriogenology (see Dystocia)  
Thrombophlebitis, 1386–1394  
definition and clinical manifestations, 1386–1387  
diagnosis, 1390–1391  
pathogenesis, 1387  
normal hemostasis, 1387–1388  
thrombus formation, 1388–1390  
prevention, 1391–1393  
treatment, 1391

**U** Ulcers, gastroduodenal (see Gastroduodenal ulcers)  
Ultrasonography, pulmonary disease, diagnostic imaging of, 1110–1118  
Update on Equine Therapeutics  
antiendotoxin serum, 1096–1099  
injectable regimens for standing restraint and anesthesia, 1283–1285

**V** Vascular disorders (see Thrombophlebitis)  
Venereal disease (see Penis and prepuce)

**W** Wounds, healing of (see also Second-intention healing), 850–855  
local factors, 851  
bacteria, 851  
dead space, 852  
devitalized tissue, 852  
drainage, 852  
foreign bodies, 851–852  
hematomas and seromas, 852  
movement, tension, and edema, 852–853  
systemic factors, 853  
wound biology, 851

## FOOD ANIMAL AUTHOR INDEX

### **A**

Anderson, K.L., 1125

### **B**

Baum, K.H., 1147  
 Baxter, G.M., 505  
 Beeman, K.B., 1415  
 Bristol, D.G., 868, 983

### **C**

Claxton, M.S., 974  
 Corah, L.R., 499

### **D**

Davis, L.E., 355  
 Deen, J., 1299  
 Deluyker, H.A., 1159, 1307  
 Dubovi, E.J., 1147  
 Dukas, P.A., 1159, 1307

### **E**

Eicker, S., 233, 349  
 Engelken, T.J., 499  
 Evermann, J.F., 205

### **F**

Floyd, J.G., 1302  
 Friendship, R.M., 1512  
 Furman, J.W., 95

### **G**

Galland, J.C., 1159, 1168, 1307  
 Goodger, W.J., 233, 349, 1168

### **H**

Henry, B.E., II, 205  
 Henry, S.C., 99, 216  
 Hoffsis, G.F., 519  
 Hollis, L.C., 763, 1523  
 Holmberg, C.A., 1168  
 Hooke, R.L., 1147  
 Huber, B.J., 1415  
 Hughes, M.A., 95  
 Hunter, W.S., 1147

### **J**

Jameson, C., 233, 349  
 Johnson, E.G., 1135

### **K**

Kasari, T.R., 655, 769  
 Kennedy, S., 662  
 Kerr, L.A., 1139  
 Kirkpatrick, C.E., 80  
 Knight, A.P., 87, 528  
 Koritz, G.D., 201

### **L**

Langston, V.C., 355  
 Lean, I.J., 1168  
 Leipold, H.W., 1415  
 Lessard, P., 1147  
 Liggett, A.D., 1409  
 Luescher, U.A., 515

### **P**

Perino, L.J., 1523  
 Perry, B.D., 1147

### **R**

Randle, R.F., 1302  
 Repp, S., 233, 349  
 Ribble, C.S., 1515  
 Rings, D.M., 519  
 Rousseaux, C.G., 1515  
 Roussel, A.J., 655, 769

### **S**

Saint-Jean, G., 519  
 Sanders, D.E., 757  
 Schultz, R.A., 365  
 Smith, J.A., 87  
 Spire, M.F., 499

### **T**

Toben, C.G., 874  
 Troutt, H.F., 1168

### **V**

Van Alstine, W.G., 874  
 Van Vleet, J.F., 662

### **W**

Weaver, L.D., 233, 349, 1159,  
 1168, 1307  
 Williams, R.J., 87

## VOLUME 11 PAGINATION

<i>Issue</i>	<i>Pages</i>	<i>Issue</i>	<i>Pages</i>
January	78-112	July	866-880
February	198-240	August	972-992
March	346-376	September	1120-1184
April	496-536	October	1296-1312
May	652-672	November	1406-1432
June	754-776	December	1510-1527

## FOOD ANIMAL SUBJECT INDEX

### **A**

Antimicrobial drugs, selection of (see  
*Pharmacology*)  
 Arthritis, drug therapy for (see also  
*Pharmacology*)

antibiotics, 87-90  
 antiinflammatory drugs, 89-92  
 corticosteroids, 90-91  
 nonsteroidal, 91-92

## FOOD ANIMAL SUBJECT INDEX—CONTINUED

causative organisms, 88-89  
 joint drainage and lavage, 89  
 Automated milk yield recording (see  
 Computerized automated milk yield  
 recording)

### **B**

Bacterial endocarditis (see Endocarditis,  
 bacterial)  
 Beef production management  
 breeding bull management, 95-98  
 creep feeding beef calves, 499-504  
 implant technique in feedlot cattle, 763-768  
 information utilization in health management  
 decisions, 1523-1527  
 intensified rotational grazing, 1135-1137  
 Behavior problems of swine, 515-518  
 aggression, 517  
 aggression toward piglets by the dam, 517-518  
 clinical approach, 516  
 ear biting, 516-517  
 flank sucking, 516  
 pen fouling, 517  
 species-typical behavior, 515-516  
 tail biting, 516  
 Bovine viral diarrhea-mucosal disease in cattle,  
 1147-1156  
 and congenital defects, 1148  
 clinical signs, 1147-1148  
 diagnostic procedures, 1148-1152  
 exposed herds, 1149  
 herds with persistent infection, 1149  
 naive patients, 1148  
 patients with mucosal disease, 1149  
 persistently infected patients, 1149  
 differential diagnosis, 1147  
 epidemiology, 1152-1154  
 laboratory findings, 1148  
 Breeding  
 bulls, breeding, 95-98  
 breeding season, 97-98  
 breeding soundness examination, 96-97  
 postbreeding season, 98  
 selection, 95-96  
 bulls, teaser, preparation of, 974-981, 990  
 artificial corpus cavernosal thrombosis, 976  
 caudal epididymectomy, 974-975  
 iatrogenic preputial stenosis, 975-976  
 penile translocation, 976-977  
 penopexy, 977  
 phalloectomy, 980  
 preputial pouch technique, 975

### **C**

Causal relationships  
 determining likelihood of, 1299-1301, 1305  
 in developmental anomalies, 1515-1521  
 Cobalt in bovine nutrition, 757-759, 768  
 Computerized automated milk yield recording,  
 1159-1166, 1174  
 automated cow identification, 1160-1161, 1164  
 control units, 1165  
 daily milk weight and DHIA data, 1310  
 data base characteristics, 1165

downloading of data to spreadsheets  
 milk measurement devices, 1166  
 monitoring  
 long-term milk yield, 1309  
 operator and milking system, 1307-1309  
 short-term milk yield, 1309  
 process and central computers, 1165  
 programs that use yield data base, 1166  
 protection against power surge or outage,  
 1162-1164

reports, 1307-1311  
 at parlor control units, 1310  
 production of strings and the herd,  
 1309-1310

Computerized recordkeeping (see also Beef  
 Production Management, Dairy Production  
 Management, and Swine Production  
 Management)  
 Congenital defects (see Umbilical masses,  
*Veratrum californicum* poisoning, and  
 Developmental anomalies)  
 Cottonseed meal (see Gossypol toxicosis)  
 Creep feeding of beef calves, 499-504  
 economics, 499-500  
 methods, 501  
 postweaning effects, 501-502  
 Cytomegalovirus, bovine, 205-214

### **D**

Dairy production management, 233  
 automated milk yield recording, 1159-1166,  
 1174, 1307-1311  
 cobalt in bovine nutrition, 757-759, 768  
 on-farm computer system, role of veterinarian  
 in, 233-238, 349-353  
 Developmental anomalies, determining causes  
 of, 1515-1521  
 Dose regimens (see Pharmacology)  
 Drugs (see Pharmacology)

### **E**

Endocarditis, bacterial, 655-671, 769-773  
 diagnosis, 657-658  
 in cattle, 769-771  
 causes, 769-770  
 history and clinical signs, 770-771  
 pathologic findings, 771  
 in swine, 772-773  
 pathogenesis, 655-657  
 endothelial damage, 655-656  
 bacteremia, 656  
 bacterial adherence and vegetation  
 formation, 656-657  
 treatment, 658-659  
 Endotracheal intubation (see Xylazine  
 hydrochloride sedation)  
 Experimental method, 1518-1519

### **F**

Feeding (see Nutrition)

### **G**

Giardiasis, 80-84  
 clinical aspects, 81-83

## FOOD ANIMAL SUBJECT INDEX—CONTINUED

cattle, 82  
 general, 81–82  
 other ruminants, 82  
 diagnosis, 83–84  
 epizootiology, 81  
**Gossypol toxicosis**, 1139–1143, 1146  
 composition of cottonseed meal, 1139–1140  
 toxicity in monogastric animals, 1140  
 toxicosis in ruminants, 1140–1143  
     clinical signs, 1141  
     diagnosis, 1141–1142  
     mechanism of action, 1142  
     treatment, 1142–1143  
**Grazing**, intensified rotational, 1135  
 mob grazing of alfalfa, 1135–1137  
     with supplemental feeding, 1135–1137  
     without supplemental feeding, 1137  
 rotational creep grazing by suckling calves, 1136–1137

### **H**

*Hemophilus pleuropneumoniae* in swine, 365–374  
 bacterial nomenclature, 365–366  
 clinical signs, 365–366  
 culture and sensitivity, 366–367, 370–371  
 elimination from a herd, 371–372  
 pathologic findings, 366  
 serology, 368–371  
 treatment and control, 367, 372–373  
     other measures, 373  
     vaccination, 372–373  
 virulence, 367–368  
**Hemorrhagic syndrome**, porcine, 1409–1413  
 causes of vitamin K deficiency, 1410–1412  
     defective utilization in liver, 1412  
     inadequate nutritional intake, 1410–1411  
     inadequate synthesis in bowel, 1411  
     reduced absorption from bowel, 1411  
 epidemiology and clinical signs, 1409–1412  
 laboratory findings, 1410  
 role of vitamin K, 1410  
 treatment and prevention, 1412–1413  
**Herpesvirus**  
 bovine cytomegalovirus, 205–214  
 bovine rhinotracheitis, 205–214  
 classification and nomenclature, 205–266  
 diagnosis, 209–212  
 disease spectrum, 207–209  
 serology, 209–212  
 transmission, 206–207  
**Hypomagnesemia** (see Nutrition)

### **I**

Implants in feedlot cattle, problems with, 763–768  
 corrective action, 765–768  
 economic impact, 765  
**Intubation, endotracheal** (see Xylazine hydrochloride sedation)

### **J**

**John's disease** in sheep, 1415–1421  
 causative organism, 1415–1416  
 clinical signs, 1416

diagnosis, 1416  
 pathogenesis, 1416  
 transmission, 1416  
 treatment and control, 1419–1421

### **M**

**Mastitis**, acute coliform, 1125–1133  
 clinical assessment, 1126  
 diagnosis of, 1126  
 management, 1126–1133  
     antihistaminic drugs, 1132  
     antiinflammatory agents, 1128  
     antimicrobial therapy, 1126–1128  
     fluid therapy, 1128  
         calcium solutions, 1128  
         glucose, 1128  
     polymixin B, 1132  
     stripping of affected quarters, 1127  
 pathogenesis of, 1125–1126

### **N**

Noncompliance with veterinary advice, swine producers, 1512–1514, 1521  
**Nutrition**, bovine  
 cobalt deficiency, 757–759, 768  
     and vitamin B<sub>12</sub>, 757–758  
     clinical pathology, 759  
     clinical signs, 759  
     diagnosis, 759  
     ionophores, 758  
     mechanism of, 758  
     prevention and control, 759  
 creep feeding of beef calves, 499–504  
 hypomagnesemia in ruminants, 519–526  
     clinical pathology and diagnosis, 521  
     clinical signs, 520–521  
     differential diagnosis, 522  
     endocrine regulation, 520  
     incidence, 520  
     magnesium content of feed ingredients, 521  
     metabolism, 519–520  
     prevention, 523  
     recognized syndromes, 520  
     treatment, 522

**Nutrition**, swine (see also Selenium–vitamin E deficiency and Hemorrhagic syndrome, porcine), rations, 99–110, 216–230  
 alternative preparation systems, 100  
     base mix for on-farm ration preparation, 101  
     complete feed, 101  
      premix for on-farm ration preparation, 101–103  
     supplement grain, 101  
 antibiotics and feed additives, 220–222  
 base mix specifications, 218, 220, 222–224  
 example rations, 102, 104, 106, 108–110, 226–230  
 ration recipes, 100  
 using base mixes, 216–230  
      bidding and purchasing, 217  
     components for base mix preparation, 217  
     optimization and quality control, 220–224  
     preparation, 217–219  
     quality control, 217

## FOOD ANIMAL SUBJECT INDEX—CONTINUED

using premixes, 103–110  
 components for premix preparation, 105  
 vitamin and mineral premix specifications, 100, 224

### P

Parasitology (see Giardiasis)  
 Paratuberculosis (see Johne's disease)  
 Pharmacology  
 antimicrobial drugs, 355–363  
 agent data, 359  
 combination therapy, 358–362  
 dose and formulation, 357–358  
 extralabel drug use, 362–363  
 preliminary cultures, 355–356  
 sensitivity testing, 356–357  
 tissue penetration, 356  
 withdrawal times, 363  
 drug clearance, 202  
 drug distribution, 201–202  
 planning dose regimens, 202–204  
 therapeutic window, 201  
 withdrawal times, 203, 363, 586  
 Poisonous Plants  
*Veratrum californicum* poisoning, 528–531  
 Production records, determining causality from, 1299–1301, 1305  
 causality, evaluating likelihood of, 1301  
 coherence, 1301  
 dose-response relationship, 1301  
 repeatability, 1301  
 specificity of association, 1301–1305  
 strength of association, 1301  
 time sequence, 1301  
 limitations of data, 1299–1300  
 confounding variables, 1299–1300  
 unobserved variables, 1299–1300  
 types of causation, 1300–1301

### R

Records, producer (see Beef Production Management, Dairy Production Management, and Swine Production Management)  
 Reproduction (see Breeding)  
 Retrospective studies, limitations of, 1299–1301, 1305, 1517–1518  
 Rhinotracheitis, bovine (see Herpesvirus)

### S

Selenium-vitamin E deficiency in swine, 662–668  
 causes, 662–663  
 clinical and pathologic findings, 663–667  
 diagnosis, 664  
 effects on infectious disease, 663  
 problem herds, 666–667  
 treatment, 664–666  
 Somatotropin, bovine, 1168–1173  
 effects, 1168–1172  
 dry matter intake, 1169  
 increased mammary perfusion, 1169  
 mammary efficiency, 1169  
 on fertility and health, 1169–1171  
 on mammary development, 1172  
 on milk production, 1169–1171  
 partitioning of nutrients, 1168–1169

structure and function, 1168  
 Statistical significance, relevance of, 1301, 1518–1519  
 Swine Production Management  
 differentiating association and causation in interpreting swine production records, 1299  
 porcine behavior problems, 515–518  
 producer noncompliance with veterinary advice, 1512–1514, 1521  
 swine rations, 99–110, 216–230

### T

Teaser bulls (see Breeding)  
 Teat and udder surgery in dairy cattle, 868–873, 983–988  
 abnormalities of the teat sphincter, 985–986  
 congenital abnormalities, 869–870  
 embryology and anatomy, 868–869  
 surgical procedures  
 implants, 984–985, 987  
 thelotomy, 984  
 through the papillary duct, 983–985  
 teat amputation, 986–987  
 traumatic injuries, 870–872  
 crushing injuries, 872  
 degloving injuries, 871–872  
 lacerations, 870–871  
 udder surgery, 987–988  
 Theriogenology (see Breeding)  
 Tuber ischiadicum, detachment of, in swine, 874–879  
 clinical and pathologic findings, 874–877  
 diagnosis, 878  
 differential diagnosis, 876  
 pathogenesis, 877–878  
 prognosis, 878

### U

Udder surgery (see Teat and udder surgery)  
 Umbilical masses in calves, 505–513  
 anatomy, 505–506  
 complications, 512–513  
 diagnosis and treatment, 506–511  
 enlarged umbilical stalk, 510–511  
 surgical management, 511–512  
 umbilical abscess, 510  
 umbilical hernia, 506  
 with localized fibrotic cord or abscess, 506–507  
 with umbilical cord remnants, 507

### V

*Veratrum californicum* poisoning, 528–531  
 Vitamin K (see Hemorrhagic syndrome, porcine)

### W

Withdrawal times (see Pharmacology)

### X

Xylazine hydrochloride sedation, 1302–1305  
 and aspiration of regurgitated ingesta, 1302–1305  
 and endotracheal intubation, 1302–1305

